

REMARKS

With the entry of the foregoing Amendments, claims 1-11 and 13-26 are pending in the application.

The claims have been amended as follows and find support as discussed below. Claim 1 has been amended to clarify that the wearing part comprises tire tread with magnetic particles inserted therein that act as the magnetic elements. Support for this amendment can be found throughout the specification, for example, page 2, lines 21-22, and Figure 1. Claim 11 has been amended to insert the subject matter of claim 12, and claim 12 has been cancelled without prejudice. In addition, claims 1-11 and 13-16 have been amended to place the claims in more conventional U.S. patent claim format. New claims 17-26 have been added as supported by original claim 1 and the specification, for example, page 2, lines 21-22, original claims 1 and 5, and Figure 1. New claim 18 is supported by the specification, for example, Figure 1 and its corresponding disclosure and the original claims 1 and 10. New claim 19 has been added as supported by the specification, for example, Figure 1 and its corresponding disclosure in the specification, including the disclosure on pages 2 and 3. New claim 20 finds the same support. New claims 21-26 correspond to original dependent claims 2, 3, 4, 7, 8 and 9. No new matter has been added by the claim amendments. Also, no new matter has been added by the specification amendments, which merely correct typographical errors.

Turning to the rejection, claims 1-11 stand rejected under 35 U.S.C. 102(b) as allegedly anticipated by Mancuso (U.S. 2003/0159503). Applicants respectfully request the withdrawal of this rejection for at least the following reasons. Applicants also note that claims 12-16 were not rejected on any prior art grounds.

First, Mancuso discloses a system for determining the state of shear deformation of a crown portion of a tire during the running of a motor vehicle. In contrast, the claimed invention concerns a “wear monitoring system.” Mancuso does not disclose or suggest the claimed invention.

Second, Mancuso teaches that its magnetic elements are magnetic strips 110 or magnetized wires that are applied to the external part of the tire or of the tread. Thus, Mancuso does not teach or suggest the claimed invention that includes magnetic particles in the tread.

Third, according to Mancuso, the sensor (111, 211) is placed on the rim. Thus, Mancuso does not disclose or suggest that the magnetic elements and/or the sensors are placed in the blocks of tread, as in many of the subject claims.

For at least the foregoing reasons, Mancuso does not anticipate the claimed invention.

To avoid any type of obviousness rejection based on Mancuso, applicants also note the following. Mancuso is concerned about and relates to the fast changes of the shape of the tire and relative movement of points on the external envelope of the tires (as depicted in the embodiments where the relative movement of two sensors 10 and 110 on the external and internal part of the tire is monitored), instead of the slow changes of the tread amount monitored by the wear system of the claimed invention. In particular, it is noted that in the Mancuso publication, the sensing element is placed on the tire for the sole reason that the movements of the magnetic field generating strips are continuously measured during one revolution of the tire. See paragraphs 49 and 61 of Mancuso. Thus, the Mancuso reference does not address the subject invention of monitoring tire wear, and improving sensitivity and reducing interference problems due to the distance between magnetic elements and a generator. Furthermore, the Mancuso reference (nor any other document in the prior art) does not disclose magnetic elements

and sensing elements inserted in the tire, tread or the tread blocks, and it also does not disclose moving the sensing element from the rim to within the tire in a deformation monitoring system -- which would not make any sense because the deformations measured would have become completely unpredictable.

In view of the foregoing amendments and remarks, applicants submit that the application is in condition for allowance. A notice to that effect is earnestly solicited.

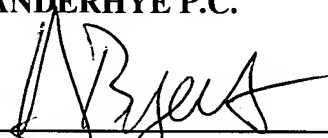
As a separate matter, applicants thank the Examiner for returning the signed copy of the Information Disclosure Statement form with the Office Action. Applicants assume that the Examiner has considered all of those references even though the Examiner's initials are not located in the left-hand column. Perhaps with the Notice of Allowance, the Examiner may wish to attach a copy of the Information Disclosure citation sheet with his initials in the left-hand column.

If the Examiner has any questions concerning this application, the undersigned may be contacted at 703-816-4009.

Respectfully submitted,

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